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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/632,375	08/01/2003	Mikio Uchida	AA540C	4170

27752 7590 02/08/2006

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EXAMINER	
CHANNAVAJJALA, LAKSHMI SARADA	

ART UNIT	PAPER NUMBER
1615	

DATE MAILED: 02/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/632,375	UCHIDA ET AL.	
	Examiner	Art Unit	
	Lakshmi S. Channavajjala	1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 November 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1 and 9-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1 and 9-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All* b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Receipt of amendment and remarks dated 11-18-05 is acknowledged.

Claims 1 and 9-20 are pending.

In view of applicants' remarks, the outstanding rejection dated 7-21-05 is replaced with the following rejection:

Claim Rejections - 35 USC § 103

1. Claims 1, 12-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,538,720 ('720) in view of US 6,540,989 ('989).

'720 teach an anhydrous composition for hair treatment, particularly hair condition effect, comprising two components that are separated until use and which when mixed with water generates heat (col. 2, lines 38-42). The first component of '720 comprises a physiologically compatible salt that generates heat upon mixing with water and a thickening agent, and the second component comprises at least polyalcohol that is liquid at 25 degrees C (col. 1, lines 30-45). '720 teach that the salts are preferably chloride salts of calcium, magnesium and zinc, which read on the instant heat-generating component (col. 1, lines 43-57). For component B, '720 teach alcohols selected from the group consisting of polyethylene glycol, polypropylene glycol, glycerol, diglycerol etc (col. 2, lines 10-37). '720 further teaches addition of conditioning agents such as cationic polymers, film-forming agents. The examples listed in col. 3-4 of '720 also recite lactic acid, along with components such as jojoba oil, that meet the claimed acid and inert carrier respectively. While '720 fail to teach magnesium sulfate, '720

differs only in the salt form (magnesium chloride of '720 versus magnesium sulfate of the claims) and absent any unexpected result with the claimed sulfate form, it would have been within the scope of a skilled artisan to choose a magnesium sulfate or magnesium chloride for generating heat in the composition.

'720 fail to teach a phase changing agent that has a melting point of about 30 degrees C to about 60 degrees C. Instant specification describes that the phase changing agent having a certain melting point of the present invention can absorb a heat from the heat generating -agent by changing its phase from solid to liquid, and then, release the heat slowly by changing its phase from liquid to solid, prevent the compositions from warming up to a higher temperature than expected, and provide prolonged warming from the compositions, without using coated heat generating agents. In this regard, '720 also teach the same compounds as heat generating agent and further states that the heat generated by the heat-generating agent is at a temperature of 40 to 60 degrees c. Accordingly, it would have been within the scope of a skilled artisan choosing the second component (of '720) such that the component is capable of absorbing the heat, generated by the salts and further maintaining the heat for proper conditioning of the hair. However, '720 fail to teach the claimed stearyl alcohol, cetyl alcohol and mixtures thereof, and also fail to teach the claimed amidoamines.

'989 teach a self-warming hair care composition comprising a glycol, a quaternary ammonium compound, an amidoamines and a silicone. The composition of

'989 is anhydrous and upon contact with water generates heat giving the user a pleasant feeling and also the conditioning ability (col. 1). '989 teach amidoamines (col. 3, lines 41-55; col. 5) and fatty alcohols (col. 4, lines 26-30; col. 5) that are also described in the instant specification. Further, '989 teach employing conditioner materials in the hair treatment compostion, selected from the group consisting of silicones, amidoamines, fatty alcohols etc (col. 4, lines 12-15). In particular, '989 teach that the preferable fatty alcohols include stearyl alcohol, cetyl alcohol etc (col. 4, lines 22-30).

Therefore, it would have been obvious for one of an ordinary skill in the art at the time of the instant invention to add amido amines and fatty alcohols (cetyl, stearyl alcohols) conditioners of '989 to the composition of '720 and use the composition for hair care such as hair conditioning because '989 teaches that amido amines and fatty alcohols act as deposition aids and conditioners, and that a heat generating composition that is self-warming gives a warm feeling to use and also provides good conditioning because of amidoamine. Accordingly, the expected result would be to effectively condition hair as well as provide a warmth sensation to use indicating that the composition is working effectively. In this respect, the cetyl alcohol and stearyl alcohol have the same melting point as that claimed. With respect to the limitation "phase changing agent", while '989 fails to state the limitation the compounds possess the property. Further, with respect to the ratio of amidoamines and acid claimed, '989 teach that a clear conditioning composition is obtained with amino acid neutralized with acid.

Accordingly, optimizing the ratio of amido amine and acid so as to obtain an effective conditioning effect.

2. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over US 5,538,720 ('720) in view of US 6,540,989 ('989) and as applied to claims 1-8, 12-16, 18 and 20 above, and further in view of EP 027 730 (EP 730).

Claim 9-11 recite polyoxyalkylene derivatives.

'720 fail to specifically teach the claimed polyoxyalkylene derivatives of the instant claims.

EP '730 teaches cosmetic compositions for hair or skin treatment, comprising heat generating compounds when brought into contact with water (page 3). Among the heat generating compounds EP 730 teaches fatty alcohols, alkylene glycols and polyoxyalkylene derivatives (page 5, in particular lines 8-19 and page 6, lines 8 to page 7, lines 13). More specifically EP 730 teaches the claimed polyoxyethylene and polyoxypropylene copolymer (example 4 on page 12). Therefore, it would have been obvious for one of an ordinary skill in the art at the time of the instant invention to use the pluronic or any other suitable polyoxyalkylene derivatives as additional heat generating agents in the composition of '720 because EP 730 teaches that the above polyoxyalkylene derivatives are preferable as heat generating compounds (page 8) and suggests that the heat generating compounds give an excellent finishing and cleansing effect to the consumer upon application, which results in a comfortable hot feeling.

Response to Arguments

Applicant's arguments filed 11-18-05 have been fully considered but they are not persuasive.

Applicants argue that '720 fail to teach a phase changing agents such as the claimed fatty alcohols, with the claimed melting point, and also fail to teach the anhydrous magnesium sulfate. It is argued that the salt of '720 is a bivalent chloride and does not suggest teach the claimed sulfate. However, the arguments are not persuasive because '720 is directed to the same field of endeavor and absent evidence of any criticality with respect to the salt form used (chloride or sulfate), it would have been within the scope of a skilled artisan to use either magnesium or chloride to achieve the same heat generation desired. With respect to the phase changing agent, the new rejection applied states '720 in view of '989.

With respect to rejection of claims over '720 in view of '989, applicants argue that as argued above, '720 fails to teach the claimed melting point and the salt form of magnesium. However, irrespective of the specific mention of the melting point by the references, the motivation to add the fatty alcohols and amidoamines of '989 to the heat generating composition of '720 comes from the teaching of '989 that the claimed components are useful for hair conditioning. Thus, addition of fatty alcohols in the composition of '720, results in the claimed phase changing materials.

Applicants state that EP teach fatty alcohols, alkylene glycols and polyoxyalkylene derivatives, but argues that all of the limitations are not taught by the

combination because '720 fails to teach magnesium sulfate and phase changing limitations claimed. However, applicants' arguments regarding the teachings of '720 have been addressed in the previous paragraphs. The teachings of EPO are also analogous to that of US '720 and US '989 and accordingly, one of an ordinary skill in the art would have been motivated to add the polyoxyalkylene derivatives of EP in the composition of US '720 with an expectation to achieve an excellent finishing and cleansing effect to the consumer upon application, which results in a comfortable hot feeling with the compound so of EP.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lakshmi S. Channavajjala whose telephone number is 571-272-0591. The examiner can normally be reached on 9.00 AM -6.30 PM

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K. Page can be reached on 571-272-0602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Lakshmi S Channavajjala
Examiner
Art Unit 1615
February 6, 2006